WE CLAIM AS OUR INVENTION:

1. A magnetic resonance antenna comprising:

a plurality of antenna elements, each antenna having an element beginning and an element end;

said antenna elements being disposed radially relative to a center axis so as to proceed outwardly from the respective element beginnings to the respective element ends;

said antenna elements being at least magnetically coupled with each other; and

said plurality being at least five.

- 2. A magnetic resonance antenna as claimed in claim 1, wherein the respective element beginnings and the respective element ends are connected to ground.
- 3. A magnetic resonance antenna as claimed in claim 1 wherein said antenna elements are electrically coupled to each other.
- 4. A magnetic resonance antenna as claimed in claim 3 wherein the respective element beginnings are electrically connected to each other via a ring-shaped connecting element.
- 5. A magnetic resonance antenna as claimed in claim 3 wherein the respective element ends are electrically connected to each other via a ring-shaped connecting element.
- 6. A magnetic resonance antenna as claimed in claim 3 wherein the respective element beginnings are electrically connected to each other via a first ring-shaped connecting element and wherein the respective

element ends are electrically connected to each other via a second ringshaped connecting element.

- 7. A magnetic resonance antenna as claimed in claim 1, wherein each of said antenna elements has two branching element ends.
- 8. A magnetic resonance antenna as claimed in claim 1 wherein the respective element beginnings define an element beginning plane and wherein the respective element ends defines an element end plane, and wherein said element beginning plane and said element end plane are parallel to and spaced from each other.
- 9. A magnetic resonance antenna as claimed in claim 8 wherein the respective antenna elements are linear.
- 10. A magnetic resonance antenna as claimed in claim 8 wherein the respective antenna elements define respective line directions, said line directions intersecting said center axis at a common point.
- 11. A magnetic resonance antenna as claimed in claim 10 further comprising a grounding plate disposed parallel to said element beginning plane and said element end plane, and said common point being disposed in said grounding plate.
- 12. A magnetic resonance antenna as claimed in claim 8 further comprising a grounding plate disposed parallel to said element beginning plane and said element end plane.
- 13. A magnetic resonance antenna as claimed in claim 1 wherein said plurality is divisible for four.